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| APPLICATION NO.   | FILING DATE                | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|----------------------------|----------------------|---------------------|------------------|
| 10/578,932  | 05/08/2006                 | Yonggang Du          | CN03 0039 US1       | 4497             |
| 24737 7590 10/07/2008 PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 |                            |                      | EXAMINER            |                  |
|   |                            |                      | BATISTA, MARCOS     |                  |
| BRIARCLIFF I  | BRIARCLIFF MANOR, NY 10510 |                      | ART UNIT            | PAPER NUMBER     |
|   |                            |                      | 2617                |                  |
|   |                            |                      |                     |                  |
|   |                            |                      | MAIL DATE           | DELIVERY MODE    |
|   |                            |                      | 10/07/2008          | PAPER            |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|  | Application No.   | Applicant(s)          |  |  |  |  |  |
|--|---|-----------------------|--|--|--|--|--|
|  | 10/578,932  | DU ET AL.             |  |  |  |  |  |
| Office Action Summary  | Examiner  | Art Unit              |  |  |  |  |  |
|  | MARCOS BATISTA  | 2617                  |  |  |  |  |  |
| The MAILING DATE of this communication app<br>Period for Reply   | ears on the cover sheet with the c  | orrespondence address |  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |   |                       |  |  |  |  |  |
| Status   |   |                       |  |  |  |  |  |
| 1) Responsive to communication(s) filed on 16 Ju   | dv 2008   |                       |  |  |  |  |  |
| ,—   | action is non-final.  |                       |  |  |  |  |  |
| <i>7</i>   | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is |                       |  |  |  |  |  |
| .—   | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.               |                       |  |  |  |  |  |
|  |   |                       |  |  |  |  |  |
| Disposition of Claims  |   |                       |  |  |  |  |  |
| ,  | Claim(s) <u>1-20</u> is/are pending in the application.   |                       |  |  |  |  |  |
|  | 4a) Of the above claim(s) is/are withdrawn from consideration.  |                       |  |  |  |  |  |
| 5) Claim(s) is/are allowed.  |   |                       |  |  |  |  |  |
| 6)⊠ Claim(s) <u>1-20</u> is/are rejected.  | 6)⊠ Claim(s) <u>1-20</u> is/are rejected.   |                       |  |  |  |  |  |
| 7) Claim(s) is/are objected to.  | ) Claim(s) is/are objected to.  |                       |  |  |  |  |  |
| 8) Claim(s) are subject to restriction and/or  | 8) Claim(s) are subject to restriction and/or election requirement.   |                       |  |  |  |  |  |
| Application Papers   |   |                       |  |  |  |  |  |
| 9)☐ The specification is objected to by the Examiner.  |   |                       |  |  |  |  |  |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.   |   |                       |  |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |   |                       |  |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).   |   |                       |  |  |  |  |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |   |                       |  |  |  |  |  |
| Priority under 35 U.S.C. § 119   |   |                       |  |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:   |   |                       |  |  |  |  |  |
| ·— ·— ·—   | ,— ,— ,—  |                       |  |  |  |  |  |
|  | ······································  |                       |  |  |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage  |   |                       |  |  |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).  |   |                       |  |  |  |  |  |
|  |   |                       |  |  |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.   |   |                       |  |  |  |  |  |
|  |   |                       |  |  |  |  |  |
| Attachment(s)  |   |                       |  |  |  |  |  |
| 1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)  |   |                       |  |  |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  Paper No(s)/Mail Date  3) Information Disclosure Statement(s) (PTO/SB/08)  Notice of Informal Patent Application  |   |                       |  |  |  |  |  |
| 3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date  5) Notice of Informal Patent Application 6) Other:  |   |                       |  |  |  |  |  |
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#### **DETAILED ACTION**

#### Art Unit-Location

1. The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2617.

2. This Action is in response to Applicant's amendment filed on 07/16/2008. Claims 1-20 are still pending in the present application. This Action is made **NON-FINAL**.

# Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459

(1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 4. Claims 1, 7-9, 12, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sundar et al. (US 20030134650 A1), hereafter "Sundar," in view of Benchetritet al. (US 20030065817 A1), hereafter "Benchetritet."

Consider claim 1, Sundar discloses a communication method performed by a WWAN network system for a mobile terminal with a WWAN address in the WWAN to handover between the WWAN and a WLAN, comprising (see fig. 5, par. 0065): receiving a registration report sent by the mobile terminal when the mobile terminal enters the WLAN, wherein the registration report at least contains a WLAN address that the mobile terminal acquires when entering the WLAN (see fig. 15, par. 0077 – the SIP message, which are exchanged between the different networks, contains IP addresses related information).

Sundar discloses claim 1 above, but does not particular refer to establishing mapping relationship between the WWAN address and the WLAN address of the mobile terminal.

Benchetritet, in analogous art, teaches establishing mapping relationship between the WWAN address and the WLAN address of the mobile terminal (see figs. 5 and 7, pars. 0021 lines 1-7, 0076 lines 17-20).

It would have been obvious to a person of ordinary skill in the art at the time the

links between a private network and a public network (see par. 0023).

invention was made to modify the invention of Sundar and have it include establishing mapping relationship between the WWAN address and the WLAN address of the mobile terminal, as taught by Benchetritet. The motivation would have been for establishing a plurality of network

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Consider claim 7, Sundar discloses a communication method performed by a mobile terminal with a WWAN address, for the mobile terminal to handover between a WWAN and a WLAN, comprising acquiring a WLAN address when entering the WLAN (see fig. 15, par. 0077); sending a registration report to the WWAN network system, wherein the registration report at least contains the WLAN address (see fig. 15, par. 0077).

Sundar, however, does not particular refer to wherein the WWAN network system establishes a mapping relationship between the WWAN address and the WLAN address of the mobile terminal according to the registration report.

Benchetritet, in analogous art, teaches establishes a mapping relationship between the WWAN address and the WLAN address of the mobile terminal (see figs. 5 and 7, pars. 0021 lines 1-7, 0076 lines 17-20).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Sundar and have it include establishing mapping relationship between the WWAN address and the WLAN address of the mobile terminal, as taught by Benchetritet. The motivation would have been for establishing a plurality of network links between a private network and a public network (see par. 0023).

Consider claim 8, Sundar as modified by Benchetritet discloses claim 7 above. Sunday also discloses sending a report for canceling registration to said WWAN network system so as to notify said WWAN network system that said WLAN address of the mobile terminal is invalid when the mobile terminal leaves said WLAN (see fig. 9, par. 0071 lines 1-11).

Consider claim 9, Sundar as modified by Benchetritet discloses claim 8 above. Sundar also discloses wherein said registration report and said report for canceling registration can be transferred to said network system via one of WWAN link and WLAN link (see fig. 9, par. 0071 lines 1-11).

Consider claim 12, this is an apparatus claim corresponding to method claim 1. Therefore, it has been analyzed and rejected based upon the method claim 1 above.

Consider claim 17, this is an apparatus claim corresponding to method claim 1. Therefore, it has been analyzed and rejected based upon the method claim 1 above.

Consider claim 18, Sundar as modified by Benchetritet teaches claim 17 above. Sundar also teaches wherein: said sending unit sends a report for canceling registration to said WWAN network system to notify said WWAN network system that said WLAN address of the mobile terminal is invalid when the mobile terminal leaves said WLAN (see fig. 9, par. 0071 lines 1-11).

5. Claims 2-6, 10, 11, 13-16, 19 and 20 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Sundar et al. (US 20030134650 A1), hereafter "Sundar," in view of Benchetritet al. (US 20030065817 A1), hereafter "Benchetritet," further in view of Chiueh et al. (US 20050053034 A1), hereafter "Chiueh."

Consider claim 2, Sundar as modified by Benchetritet teaches claim 1 above. Sundar also teaches receiving the data information to be sent to said mobile terminal from a source address (see par. 0093 lines 12-20); sending the data information containing said WLAN address to said mobile terminal via said WLAN (see fig. 22, par. 0083).

Sundar as modified by Benchetritet, does not particular refer to encapsulating said WLAN address into the data information to be sent to said mobile terminal, according to the mapping relationship between said WWAN address and said WLAN address.

Chiueh, in analogous art, teaches encapsulating said WLAN address into the data information to be sent to said mobile terminal, according to the mapping relationship between said WWAN address and said WLAN address (see par. 0056 lines 10-23).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Sundar as modified by Benchetritet and have it include encapsulating said WLAN address into the data information to be sent to said mobile terminal, according to the mapping relationship between said WWAN address and said WLAN address, as taught by Chiueh. The motivation would have been in order to. The motivation would have been in order to provide seamless routing capability when moving across different networks (see par. 0056).

Consider claim 3, Sundar as modified by Benchetritet teaches claim 1 above. Sundar also teaches receiving the data information containing said WLAN address sent by said mobile terminal to a destination address via said WLAN (see par. 0078).

Sundar as modified by Benchetritet, does not particular refer to unpacking the data information containing said WLAN address and sending the unpacked data information to the destination address.

Chiueh, in analogous art, teaches unpacking the data information containing said WLAN address and sending the unpacked data information to the destination address (see par. 0065). The motivation would have been in order to provide seamless routing capability when moving across different networks (see par. 0065).

Consider claim 4, Sundar as modified by Benchetritet and Chiueh teaches claim 3 above. Sundar also teaches receiving a report for canceling registration sent by said mobile terminal when the mobile terminal leaves said WLAN (see fig. 9, par. 0071 lines 1-11); deleting the mapping relationship between said WWAN address and said WLAN address of said mobile terminal in the network system according to said report for canceling registration (see fig. 9, par. 0071 lines 14-21 – clean-up and de-registration refer to deleting the configuration related to the previous connection).

Consider claim 5, Sundar as modified by Benchetritet and Chiueh teaches claim 3 above. Chiueh also teaches receiving a registration report sent by said mobile terminal when said mobile terminal enters another WLAN, wherein the registration report at least contains another WLAN

address said mobile terminal acquires when said mobile terminal enters the another WLAN (see par. 0056 lines 1-8); updating the mapping relationship between said WWAN address and said WLAN address of said mobile terminal to the mapping relationship between said WWAN address and the another WLAN address according to said registration report (see par. 0080 lines 20-27). The motivation would have been in order to provide seamless routing capability when moving across different networks (see pars. 0056 and 0080).

Consider claim 6, Sundar as modified by Benchetritet and Chiueh teaches claim 4 above. Sundar also teaches wherein said registration report and said report for canceling registration can be transferred to the network system via one of WWAN link and WLAN link (see fig. 9, par. 0071 lines 1-11).

Consider claim 10, Sundar as modified by Benchetritet discloses claim 9 above. Sundar as modified by Benchetritet does not particular refer to receiving the data information containing said WLAN address transferred via said WWAN network system from a source address, wherein said WLAN address is encapsulated in the data information by said WWAN network system; unpacking the received data information so as to get the data information from the source address.

Chiueh, in analogous art, teaches receiving the data information containing said WLAN address transferred via said WWAN network system from a source address, wherein said WLAN address is encapsulated in the data information by said WWAN network system (see par. 0056 lines 10-23); unpacking the received data information so as to get the data information from the

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source address (see par. 0065). The motivation would have been in order to provide seamless routing capability when moving across different networks (see pars. 0056 and 0065).

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Consider claim 11, Sundar as modified by Benchetritet and Chiueh teaches claim 10 above. Chiueh also teaches encapsulating said WLAN address into the data information to be sent to a destination address (see par. 0056 lines 10-23); sending the data information containing said WLAN address to said WWAN network system, so as to send the data information unpacked by said WWAN network system to the destination address (see par. 0065). The motivation would have been in order to provide seamless routing capability when moving across different networks (see pars. 0056 and 0065).

Consider claims 13-16, these are system claims corresponding to method claims 2-5.

Therefore, they have been analyzed and rejected based upon the method claims 2-5 respectively.

Consider claim 19, Sundar as modified by Benchetritet teaches claim 18 above. Sundar as modified by Benchetritet does not particular refer to wherein: said receiving unit receives the data information containing said WLAN address transferred via said WWAN network system from a source address, wherein said WLAN address is encapsulated in the data information by said WWAN network system; an unpacking unit unpacks the received data information to get the data information from the source address.

Chiueh, in analogous art, teaches wherein: said receiving unit receives the data information containing said WLAN address transferred via said WWAN network system from a

source address, wherein said WLAN address is encapsulated in the data information by said WWAN network system (see par. 0056 lines 10-23); a unpacking unit unpacks the received data information to get the data information from the source address (see par. 0065). The motivation would have been in order to provide seamless routing capability when moving across different networks (see pars. 0056 and 0065).

Consider claim 20, Sundar as modified by Benchetritet and Chiueh teaches claim 19 above. Chiueh also teaches an encapsulating unit, for encapsulating said WLAN address into the data information to be sent to a destination address (see par. 0056 lines 10-23); said sending unit sends the data information containing said WLAN address to said WWAN network system, so as to send the data information unpacked by said WWAN network system to the destination address (see par. 0065). The motivation would have been in order to provide seamless routing capability when moving across different networks (see pars. 0056 and 0065).

# Response to Arguments

6. Applicant's arguments with respect to claims 1, 7, 12 and 17 have been considered but are moot in view of the new ground(s) of rejection.

### Conclusion

7. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Marcos Batista, whose telephone number is (571) 270-5209. The Examiner can normally be reached on Monday-Thursday from 8:00am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's

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supervisor, Rafael Pérez-Gutiérrez can be reached at (571) 272-7915. The fax phone number for

the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-

3028.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist/customer service whose telephone number is (571) 272-

2600.

Marcos Batista

/M. B./

/Rafael Pérez-Gutiérrez/

Supervisory Patent Examiner, Art Unit 2617

09/29/2008